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THE WECAGRAM



Newsletter of the

Westchester Emergency Communications Association, Inc.

Post Office Box 831

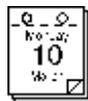
Sleepy Hollow, New York 10591-0831

WECA Information Hotline: 914-741-6606

Web site: <http://www.weca.org>

Serving the Public through Amateur Radio and serving Amateurs since 1972

Volume 21, Issue 3 March 1997



Next Meeting

The next WECA meeting will be held on Monday, March 10, 1997 at the Westchester County Center in White Plains, beginning at 7:30 p.m. with a social half-hour followed by the main program at 8 p.m.

At this meeting, Tom Raffaelli, WB2NHC, will discuss the upcoming WECAFEST.

Hope you can all make it to the meeting.

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WECAFEST

The next WECAFEST will be held at the Yonkers Raceway on Sunday, March 23, 1997. Volunteers who would like to help out at WECAFEST should contact Bill, N2QZB, or Tom, WB2NHC, at 914-769-1486.



Nominating Committee

Election time is coming up. All officers (President, Executive Vice President, Vice President/General Counsel, Secretary and Treasurer) as well as the Director at Large, and the Engineering, Repeater Operations, Education and Social Director positions are up for election. (See the masthead on page 2 for the incumbents.)

A nominating committee consisting of Alan, N2Y GK, Fran, N2OLU, and Stan, WA2NRV, was formed at the February membership meeting. They were charged with presenting a slate at the May meeting. Please contact them if you would like to run or know of someone the committee should consider.



Prof. Noam at Feb Meeting

The guest speaker at the February membership meeting was Prof. Eli Noam, KE2PN, Director of Columbia University's Institute for Tele-Information (CITI). He presented a talk based on his paper "Kobe's Lesson: Dial 711 for 'Open' Emergency Communications," which appeared in the November 1, 1996 issue of *Science*.

He talked about the aftermath of the earthquake that struck Kobe, Japan, in January 1995, and how communications were congested to the point of uselessness. Incoming telephone calls into the region were fifty times the normal peak usage, while outbound calls were only three times peak. Kobe's \$80 million satellite communications system failed. The communications system that proved most useful was an ad hoc network of volunteers with laptops who went into the disaster area. Prof. Noam proposed a decentralized emergency information system that can be reached by calling 711.

Editor : Fuat Baran, N2YGN

Assistant to the Editor : Melissa Metz, KB2SXB

The WECAGRAM is the official newsletter of the Westchester Emergency Communications Association, Inc., a Special Service Club affiliated with the ARRL, ARES, the Westchester County Office of Disaster and Emergency Services, and RACES, and a member of the Westchester County Emergency Medical Services Council.

Any inquiries, comments, items for Swap and Shop, commercial advertising, suggestions, contributions and letters for inclusion should be sent to the editor at:
3215 Arlington Ave, #4H

Riverdale, NY 10463.

Submissions via electronic mail to wecagram@weca.org are especially welcome. You can also fax them to 212-662-6442 (ATTN: Fuat Baran). Submissions may be edited for clarity, style and space. The deadline for acceptance of material for each newsletter is the twentieth of the preceding month.

All materials are the opinions of their authors, and do not necessarily reflect the official position of WECA, its officers, directors, or the editor.

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The WECAGRAM would like to exchange newsletters with other clubs. If you are interested in receiving the WECAGRAM through such an exchange or know someone who would, please contact the editor.

WECA Officers/Directors

President: Joseph L. Brown, KB2NBN

Executive Vice President: David J. Weiss, N2OGK

V. Pres./General Counsel: Michael J. Weitzner, N2EJI

Secretary: Anthony J. Licata, N2NWZ

Treasurer: Andrew R. Farber, N4OOX

Trustee: Paul S. Vydareny, WB2VUK

County Liaison: Sanford H. Fried, N2SF

Digital Modes: Richard L. Benda, WB2QJA

Director At Large: Ronald E. Devenuti, N2TJE

Education: Barry J. Frajer, N2LE

Engineering: Robert A. Wilson, N2DVQ

Membership Services: Peter A. Johnson, N2TFC

Newsletter: Fuat C. Baran, N2YGN

Repeater Operations: Dwight P. Smith, N2FMC

Public Relations: William E. Hertwig, Jr., N2QZB

Public Service: Robert Kantor, N2TSE

Social: Salvatore Cresenzi KB2GTE

Bylaws Committee Chair: Andrew Farber, N4OOX

Awards Committee Chair: Richard Benda, WB2QJA

President Emeritus: Thomas R. Raffaelli, WB2NHC

WECA gladly accepts donations of equipment, new or used (such as from estates). Please write to WECA at the Sleepy Hollow address on the cover.

WB2ZII/R WECA operates the following repeaters:

147.060(+) MHz PL 2A (114.8 Hz)

447.475(-) MHz PL 2A (114.8 Hz)

224.400(-) MHz PL 2A (114.8 Hz)

WECAGRAM Online: <http://www.weca.org/wecagram>

From the Editor

In this issue, we conclude the serialization of the RF safety chapter of the *1997 ARRL Handbook for Radio Amateurs*. We will continue to cover this important area in upcoming issues.

This year marks WECA's 25th anniversary. A committee has been formed to plan some celebratory events. If you have ideas on how to celebrate the anniversary, please write to Anthony, N2NWZ, at n2nwz@weca.org.

73,

Mark Your Calendars

by Robert Kantor, N2TSE, Public Service Director

For those of you who plan way in advance, here are some dates for upcoming public service events that WECA will be participating in:

Sunday, April 20: 1997 Walk for Multiple Sclerosis at Rye Playland.

Sunday, April 27: March of Dimes WalkAmerica, in Mt. Kisco.

Sunday, June 8: Burke Rehab. Wheels and Heels 5K Race.

Sunday, June 8: American Diabetes Association Tour de Cure bike tour at SUNY Purchase.

Saturday, July 26: New York Philharmonic at Westchester Community College.

If you would like further information or would like to put your name on the volunteers list, give me a call on the 2m repeater, or call me at 914-949-4231.



New Members

Please welcome the following new WECA members, who have joined the club recently:

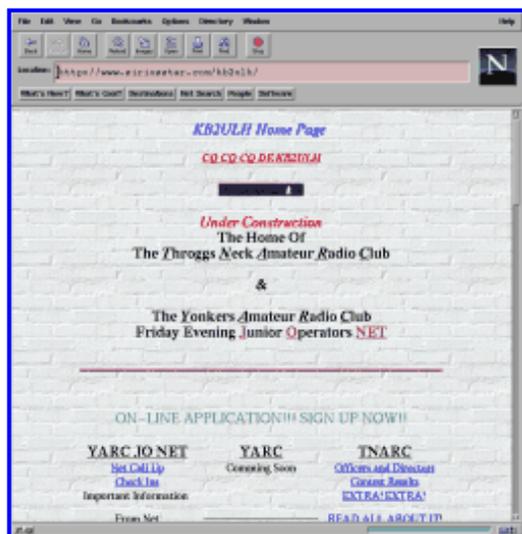
KC2ARW James Fennell White Plains, NY
KC2ARM Daniel Reilly, Jr. Ossining, NY
KC2ARX William Adams White Plains, NY

WB2IAE Gary Cohn Bedford, NY

Web Sites of the Month



www.tapr.org



www.siriusstar.com/kb2ulh

Hamming Things Up

by Bob Shore, KB2WQB

Reprinted with permission from the June 1996 issue of *Crystal Log*.

For as long as memory recalls, I have always been a radio buff. As a youth, when I was not tuned into the AM band I would be at the networks' radio studios watching live broadcasts or taking the NBC tour through Radio City. How well I remember the dramas of Norman Corwin, the comedy feuds of Jack Benny and Fred Allen, scary mystery stories, movie adaptations on Lux Radio Theater, and the wisdom of the Quiz Kids. The Lone Ranger, Jack Armstrong and Nick Carter were regular household guests during the dinner hours. Wartime news was reported by a serious Edward R. Murrow on a static-laden BBC transmission from London to CBS in New York, or by Gabriel Heather on Mutual with his optimistic opening, "Ah, yes, there's good news tonight." Concerts of the Philharmonic and NBC Symphony introduced me to classical music, while Oscar Brand, whose program is still on, did the same with folk music. I heard Mayor LaGuardia read the Sunday comics during a newspaper strike, and the noonday hour tolled by "the century-old chimes from historic City Hall" on the City station WNYC. I am not sure if it was the live broadcast or a later recording where I listened to a tearful Arthur Godfrey describing President Roosevelt's funeral and remaining ever so silent when the only sound to be heard

was the horse's hooves pulling the caisson's squeaking wheels past his microphone.

Every so often rebroadcasts of these programs turn up at weird places on the dial but fail to convey the excitement and energy of what live radio then offered. While the number of broadcast stations have since probably quadrupled, most sound as clones of each other and the spontaneity and spark are long gone. And today's television fails to challenge the imagination as radio had been able to do during its golden age.

The focal point of our living room was a multi-band console radio with sliding doors. Even when TV finally arrived, this radio could not be displaced. On Sundays my Dad would listen to his favorite crooners and then the "*Battle of the Baritones* ." When I had the radio to myself, I would switch the dial and began to pull in Chicago, mid-western and southern states and foreign countries in various languages, on the broadcast, shortwave, and, yes, amateur bands, where I was also introduced to the chirping sounds of CW. To this day, I wonder what happened to the wired battery-operated Morse Code set with which my brother and I attempted to talk with each other, the signals coming out as clicks, buzzes or a flashing bulb. Had

we stayed with learning code at that time, we would have earned our Scout merit badges. We did get hold of a microphone that could be wired into one of the tubes on our smaller bedroom Emerson radio and began to transmit closed-circuit. And, when there was interference on our brand new TV, we blamed it on the hams of the time rather than on our own electronic projects.

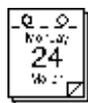
For the next thirty years, I focussed on my career in social work. In social work one learns the art of communication, active listening and engagement in in-person QSOs with people from all walks of life.

After I retired I was ready for a new career in radio, my youthful dream. I applied for a position at WLIR, and tried out as a news stringer for WRKL. However, both Rockland stations had other ideas and people in mind, and I was not ready for the midnight hours when the next day's news is recorded.

Meanwhile, I found that by manipulating the dial on the weather band of my portable radio at home, I could pick up voices talking to each other. I had discovered the 2 meter Amateur band. Listening in the morning, I realized I was getting a far better picture of the day's weather, local road conditions, and the emotional tone of just what kind of day it would be. I was also acquiring an education in antennas, beams, SWR meters, capacitors, links and the like. I also recalled the tower that stood at the former residence of K2YHM with the knowledge that somehow this linked Abe with Israel and the rest of the world. Never a traveler despite an interest in other cultures, I began to imagine that I might be able to travel around the world and make international contacts by radio.

I studied the Tech material for almost a year and was licensed in January 1996. I have made contacts all over the world since then and in October I upgraded to General. I have discovered Ham Radio is not just an enjoyable hobby, but a community eager to lend a hand, and by radio and in-person I have met any number of friendly, helpful people. I've found out who are my fellow musicians and learned Bob is the most common name in Ham Radio in this area. And it's good to know I'm struggling to upgrade along with all my co-KB2s who came in just when I did.

73 and listening, Bob, KB2WQB



Next Board Meeting

The next WECA board meeting will be on Monday, March 24, at 8 p.m. at the EOC (148 Martine Avenue) in White Plains, NY. Meetings are open to all WECA members.



ARES/RACES News

by Alan Crosswell, N2YGK

On February 8th, Alan Crosswell, N2YGK, Anthony Licata, N2NWZ, and Robert Kantor, N2TSE, represented Westchester at the ENY section-wide ARES/RACES meeting in Kingston. Eight counties were represented, along with SEC Tony Pazzola, WB2BEJ, and Rob Leiden, KR2L (formerly KF2PJ), the ENY Section Manager. Also present were Rick Warren, KF2YC, the ENY Section Traffic Manager, and Pete Cecere, N2YJZ, the NYP net manager. Joe Bruno, WB2VVS, our RACES Radio Officer and the Southern ENY DEC, had planned on attending but had the flu. We have it on good authority that Tom Raffaelli, WB2NHC, was also lurking around Kingston for an ENY Convention planning meeting that happened earlier the same day.

During the meeting, each county gave a brief presentation on their ARES/RACES program, including information on training, relationships with their local emergency management organizations and other served agencies. It was interesting to see the variety of approaches and applications of ARES/RACES in the various counties. George Chapek, N2AIG, EC for Schenectady County briefly described their program. Schenectady County has annual springtime flooding as the snow melts so ARES/RACES has developed an extensive relationship with the National Weather Service. ARES/RACES members monitor water levels among other tasks. They have installed a packet station at the NWS office, conduct daily Lake George weather nets, and use a PBBS to disseminate NWS weather forecasts. Their Emergency Operations Center is stocked with packet radio "go kits," and is on HF, 2m packet, and APRS as well. They are looking into setting up an EMWIN weather data system. (EMWIN is described in the March *QST* on page 48.) They have also used packet for hospital triage lists during drills.

Other counties talked about their packet radio setups, public service activities, and so on. April Stack, KA2QIG, AEC in Albany County, passed around a new newsletter she is editing which is geared toward served agency officials rather than toward hams.

Tony mentioned a weekly training net Sunday mornings at 9:30 (time may change to 12:30) on the Northeast Connect linked system (on 145.25 in our area) and that the operators of Northeast Connect have pre-authorized its use for emergency communications when needed. Northeast Connect is a linked repeater

system that covers the Hudson Valley down to NYC and out west to PA. There is also an NYS RACES training net each Sunday on 3993.5 at 9 p.m. Rob encouraged people to check in to that net as well. If you would like to represent Westchester to either or both of these nets, please get in touch with me.

There are plans to have a big ARES/RACES showing at the ENY Convention on April 27th at John Jay High School in East Fishkill. An ARES/RACES forum is planned and a battle of the comm vans has been proposed. We are hoping to bring the Red Cross van up and to demonstrate a live public service event as the date and time overlap with the walkathon in Mt. Kisco. I would like to be able to demonstrate a couple of APRS trackers operating at the walkathon along with live event audio from 147.06. If you have a portable packet station or would like to try setting one up, get in touch with me or Robert, N2TSE. You do not need to have a GPS (although the more of those we have the better!).

Finally, to those new ARES/RACES applicants that have not yet received any feedback, please accept my

apologies. I will be working on an updated roster with Joe and we'll be issuing new and renewal ID cards in the near future at a WECA meeting.



Southern District Net

Darlana Mayo, N2DB, net manager of the Southern District Net, reports January SDN stats as follows:

Sessions 31

Total checkins 431

Traffic brought to the net 69

Traffic passed on the net 49

Percent passed 71

Total time 471 minutes

(Only 29 of the 31 sessions are reported above.)

Westchester ARES/RACES in CQ VHF

The Westchester ARES/RACES web page was prominently and very favorably mentioned in a column entitled "Telling the World What Hams Can Do" by Peter Coffee, AC6EN, in the February 1997 issue of *CQ VHF*.

Free Power Supply

50-amp 12-volt DC power supply, 208-volt 3-phase AC input, old pipe organ rectifier free for pickup. Use it for power, use it for parts, use it to stabilize your house in high winds, the price is right!

Call 914-337-6776 daytime or 203-374-4141, ask for John, K2GTY.

For Sale

Icom 449A 440 MHz mobile. 45W output: \$300.

Cushcraft ARX450B base station 440 MHz antenna with 100 ft. of coax cable: \$50.

Both together: \$325 or best offer.

Both are brand new and have never been used.

Call Brian Torpey, N2PHW. Home: 914-769-1413 (leave message).

Latest Call Signs

As of February 20, 1997, the following call signs have been allocated in the "2" call district:

Group A (Extra) AB2DF

Group B (Advanced) KG2KB

Group C (none left)

Group D (General/Tech/Novice) KC2AYD

The FCC announced that as of February 21st, they will no longer distribute date of birth information as part of the Amateur Radio license data.

Jan. 27th Board Meeting Minutes

by Anthony Licata, N2NWZ

In attendance were N2s NWZ, TSE, DB, SF, FMC, OGK, TFC, TJE, EJI, TGK, DVQ, and WB2QJA, KB2NBN, and WA2NRV.

Meeting was called to order at 8:11 by President Joe Brown, KB2NBN. He reports that he attended a Hudson Division meeting of club presidents.

Dave, N2OGK, reports that Prof. Noam from Columbia University will talk about a proposed 711 system and spectrum auction at the February meeting.

Rich, WB2QJA, reports looking into getting a high speed (9600 baud) user node since more radios capable of that speed are now available for use.

Ron, N2TJE, reports that a get well card was sent to WB2PDX.

Peter, N2TFC, reports that we have 248 members and total of 272 on the mailing list. He receives one or two requests a week for info from the web page. He also talked about converting the operations manual into a PDF file so members could get it on disk or printed out.

Robert, N2TSE, reports the Philharmonic concert will be in July.

Anthony, N2NWZ, mentioned that this year is the club's 25th anniversary. A 25th anniversary committee consisting of Anthony, N2NWZ, Peter, N2TFC, and Darlana, N2DB, was formed to look into ways of celebrating it.

Alan, N2YGK, reports doing beta testing of his APRS mic encoder through the repeater. This could be used in Indian Point drills.

Stan, WA2NRV, reports only two people gave money for battery purchase. Not enough people signed up so he's returning the money. He's still interested in a digital mode receiver club project. If people are interested they should bring money to the March meeting.

The meeting was adjourned at 9:11.



No Batteries

Due to lack of interest (only two people signed up), the bulk discount battery purchase has been cancelled.

HVN Moves to Mt. Beacon

The Hudson Valley Net, a local net of the ARRL National Traffic System, has moved to a new location: the

146.970(-) repeater, operated by the Mount Beacon Amateur Radio Club. No PL is necessary, but a 100 Hz tone can be used for those stations located in the fringes of the repeater. The net meets every evening at 7:30 p.m., and handles traffic messages into and out of the Mid-Hudson Valley area. Much of the traffic that is routed to the Westchester and New York City-Long Island areas is passed along to the Southern District Net via liaison stations. SDN meets later on in the evening at 9:30 p.m.

Please check into all traffic nets in your local areas, compose and send traffic to friends and relatives, and be part of an important public service.

73/88,

Ed Rubin, N2JBA, Net Manager, HVN

Pete Cecere, N2YJZ, Assistant Net Manger

RF Radiation and Electromagnetic Field Safety Part 5

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Determining RF Power Density

Unfortunately, determining the power density of the RF fields generated by an amateur station is not as simple as measuring low-frequency magnetic fields. Although sophisticated instruments can be used to measure RF power densities quite accurately, they are costly and require frequent recalibration. Most amateurs don't have access to such equipment, and the inexpensive field-strength meters that we do have are not suitable for measuring RF power density. The best we can usually do is to estimate our own RF power density based on measurements made by others or, given sufficient computer programming skills, use computer modeling techniques.

Table 9.2 shows a sampling of measurements made at Amateur Radio stations by the Federal Communications Commission and the Environmental Protection Agency in 1990. As this table indicates, a good antenna well removed from inhabited areas poses no hazard under any of the various exposure guidelines. However, the FCC/EPA survey also indicates that amateurs must be careful about using indoor or attic-mounted antennas, mobile antennas, low directional arrays or any other antenna that is close to inhabited areas, especially when moderate to high power is used.

Ideally, before using any antenna that is in close proximity to an inhabited area, you should measure the RF power density. If that is not feasible, the next best option is make the installation as safe as possible by observing the safety suggestions listed in Table 9.3.

It is also possible, of course, to calculate the probable power density near an antenna using simple equations. However, such calculations have many pitfalls. For one, most of the situations in which the power density would be high enough to be of concern are in the near field--an area roughly bounded by several wavelengths of the antenna. In the near field, ground interactions and other variables produce power densities that cannot be determined by simple arithmetic.

Computer antenna-modeling programs such as MININEC or other codes derived from NEC (Numerical Electromagnetics Code) are suitable for estimating RF magnetic and electric fields around amateur antenna systems. (See the *Handbook's* **Propagation** chapter for more information about MININEC.) And yet, these too have limitations. Ground interactions must be considered in estimating near-field power densities. Also, computer modeling is not sophisticated enough to predict "hot spots" in the near field--places where the field intensity may be far higher than would be expected.

Intensely elevated but localized fields often can be detected by professional measuring instruments. These "hot spots" are often found near wiring in the shack and metal objects such as antenna masts or equipment cabinets.

But even with the best instrumentation, these measurements may also be misleading in the near field.

One need not make precise measurements or model the exact antenna system, however, to develop some idea of the relative fields around an antenna. Computer modeling using close approximations of the geometry and power input of the antenna will generally suffice. Those who are familiar with MININEC can estimate their power densities by computer modeling, and those who have access to professional power-density meters can make useful measurements.

While our primary concern is ordinarily the intensity of the signal radiated by an antenna, we should also remember that there are other potential energy sources to be considered. You can also be exposed to RF radiation directly from a power amplifier if it is operated without proper shielding. Transmission lines may also radiate a significant amount of energy under some conditions.

Further RF Exposure Suggestions

Potential exposure situations should be taken seriously. Based on the FCC/EPA measurements and other data, the "RF awareness" guidelines of Table 9.3 were developed by the ARRL RF Safety Committee. A longer version of these guidelines, along with a complete list of references, appeared in a *QST* article by Ivan Shulman, MD, WC2S. [I. Shulman, "Is Amateur Radio Hazardous to Our Health?" *QST*, Oct 1989, pp 3-34.]

In addition, *QST* carries information regarding the latest developments for RF safety precautions and regulations at the local and federal levels.

RF Safety References

IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz, IEEE Standard C95.1-1991, Institute of Electrical and Electronics Engineers, New York, 1992.

For an unbiased assessment of ELF hazards, read the series in *Science*, Vol 249 beginning 9/7/90 (p 1096), continuing 9/21/90 (p 1378), and ending 10/5/90 (p 23). Also see *Science*, Vol 258, p 1724 (1992). You can find *Science* in any large library.

An excellent and timely document is available on the Internet by anonymous FTP from: [rtfm.mit.edu, /pub/usenet-by-group/news.answers/powerlines-cancer-faq/part1](ftp://rtfm.mit.edu/pub/usenet-by-group/news.answers/powerlines-cancer-faq/part1) and [part2](ftp://rtfm.mit.edu/pub/usenet-by-group/news.answers/powerlines-cancer-faq/part2).

The Environmental Protection Agency publishes a free consumer-level booklet entitled, "EMF in Your Environment," document 402-R-92-008, dated December 1992. Look for the nearest office of the EPA in your phone book.

[Editor's note: The rest of the extensive bibliography has been omitted. See the complete chapter online at <http://www.arrl.org/news/rfsafety/hbkrf.html> -FCB]

Table 9.2--Typical RF Field Strengths Near Amateur Radio Antennas

A sampling of values as measured by the Federal Communications Commission and Environmental Protection Agency, 1990.

| Antenna Type | Freq (MHz) | Power (W) | E Field (V/m) | Location |
|-------------------------|------------|-----------|---------------|------------------|
| Dipole in attic | 14.15 | 100 | 7-100 | In home |
| Discone in attic | 146.5 | 250 | 10-27 | In home |
| Half sloper | 21.5 | 1000 | 50 | 1 m from base |
| Dipole at 7-13 ft | 7.14 | 120 | 8-150 | 1-2 m from earth |
| Vertical | 3.8 | 800 | 180 | 0.5 m from base |
| 5-element Yagi at 60 ft | 21.2 | 1000 | 10-20 | In shack |

| | | | | |
|-------------------------|-------|------|--------|-------------------|
| | | | 14 | 12 m from base |
| 3-element Yagi at 25 ft | 28.5 | 425 | 8-12 | 12 m from base |
| Inverted V at 22-46 ft | 7.23 | 1400 | 5-27 | Below antenna |
| Vertical on roof | 14.11 | 140 | 6-9 | In house |
| | | | 35-100 | At antenna tuner |
| Whip on auto roof | 146.5 | 100 | 22-75 | 2 m from antenna |
| | | | 15-30 | In vehicle |
| | | | 90 | Rear seat |
| 5-element Yagi at 20 ft | 50.1 | 500 | 37-50 | 10 m from antenna |

Table 9.3--RF Awareness Guidelines

These guidelines were developed by the ARRL RF Safety Committee, based on the FCC/EPA measurements of Table 9.2 and other data.

Although antennas on towers (well away from people) pose no exposure problem, make certain that the RF radiation is confined to the antennas' radiating elements themselves. Provide a single, good station ground (earth), and eliminate radiation from transmission lines. Use good coaxial cable, not open-wire lines or end-fed antennas that come directly into the transmitter area.

No person should ever be near any transmitting antenna while it is in use. This is especially true for mobile or ground-mounted vertical antennas. Avoid transmitting with more than 25 W in a VHF mobile installation unless it is possible to first measure the RF fields inside the vehicle. At the 1-kW level, both HF and VHF directional antennas should be at least 35 ft above inhabited areas. Avoid using indoor and attic-mounted antennas if at all possible.

Don't operate high-power amplifiers with the covers removed, especially at VHF/UHF.

In the UHF/SHF region, never look into the open end of an activated length of waveguide or point it toward anyone. Never point a high-gain, narrow-bandwidth antenna (a paraboloid, for instance) toward people. Use caution in aiming an EME (moonbounce) array toward the horizon; EME arrays may deliver an effective radiated power of 250,000 W or more.

With hand-held transceivers, keep the antenna away from your head and use the lowest power possible to maintain communications. Use a separate microphone and hold the rig as far away from you as possible.

Don't work on antennas that have RF power applied.

Don't stand or sit close to a power supply or linear amplifier when the AC power is turned on. Stay at least 24 inches away from power transformers, electrical fans and other sources of high-level 60-Hz magnetic fields.

Westchester Emergency
Communications Association, Inc.
P.O. Box 831
Sleepy Hollow, NY 10591-0831



RUSH DATED MATERIAL
 PLEASE DO NOT DELAY
 Reminder: Next meeting March 10

March 1997

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|-----------------------------------|--|-------------------------------|-------------------|-----------------------------------|
| 26 | 27 | 28 | 29 | 30 | 31 | 1 ARRI. Intl DX (phone) |
| 2  IQ YARC VE. Session ARRI. Intl DX (phone) | 3 ET. 27th State (1845) | 4 Chicago Founded (1837) | 5 | 6 Alamo Falls (1836) | 7 | 8 Young Amateurs Contest |
| 9  NM | 10  WPCA Meeting | 11 | 12 | 13 | 14 | 15 Ides of March |
| 16  IQ | 17 St. Patrick's Day | 18 | 19 First U.S. Bank Rob- bery (1831) | 20 First Day of Spring | 21 | 22 |
| 23  WCAFEFEST Palm Sunday | 24  MM  WPCA Board Meeting | 25 | 26 | 27 | 28 Good Friday | 29 |
| 30 Easter | 31  | April Fool's Day | 2 | | 4 | |

See you at [WCAFEFEST](#) on March 23